Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

1.   (Original)   A method, comprising:

substantially simultaneously reading values from a plurality of registers;

parsing a particular instruction, and determining a select number of registers to be modified in the plurality of registers;

modifying a subset of the values in the select number of registers; and

substantially simultaneously writing the values to the plurality of registers.

2.   (Original)   The method of claim 1, further comprising:

providing a means by which an entire set of values may be collectively read or collectively written by instructions that operate on the entire set of values.

3.   (Original)   The method of claim 2, wherein said substantially simultaneously reading includes reading values from a plurality of predicate registers.

4.   (Original)   The method of claim 1, wherein said substantially simultaneously reading includes reading values from a plurality of Not-a-Thing (NaT) registers.

5. (Original) The method of claim 1, wherein said parsing a particular instruction includes parsing an Itanium instruction.

6. (Original) The method of claim 5, wherein the Itanium instruction selects one register to be modified.

7. (Original) The method of claim 5, wherein the Itanium instruction selects two registers to be modified.

8. (Original) The method of claim 5, wherein the Itanium instruction selects 48 registers to be modified.

9. (Original) The method of claim 5, wherein the Itanium instruction selects up to 63 registers to be modified.

10. (Original) The method of claim 1, wherein said substantially simultaneously writing includes writing the values to a plurality of predicate registers.

11. (Original) The method of claim 10, wherein the plurality of predicate registers includes all 63 predicate registers.

12-22. (Cancelled)

23.   (Original)   A computer readable medium containing executable instructions which, when executed in a processing system, causes the system to perform a read-modify-write operation, comprising:

substantially simultaneously reading values from a plurality of registers;

parsing a particular instruction, and determining a select number of registers to be modified in the plurality of registers;

modifying a subset of the values in the select number of registers; and

substantially simultaneously writing the values to the plurality of registers.

24.   (Original)   The medium of claim 23, wherein said substantially simultaneously reading includes reading values from a plurality of predicate registers.

25.   (Original)   The medium of claim 23, further comprising:

providing a means by which an entire set of values may be collectively read or collectively written by instructions that operate on the entire set of values.

26-29. (Cancelled)